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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/625,853	07/22/2003	Tetsuya Okumura	59626 (70904)	8010	
21874 75	90 06/23/2006		EXAMINER		
EDWARDS & ANGELL, LLP			DILDINE JR,	DILDINE JR, R STEPHEN	
P.O. BOX 5587			ART UNIT	PAPER NUMBER	
BOSTON, MA	02205			TATERNOMBER	
			2133		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/625,853	OKUMURA ET AL.			
		Examiner	Art Unit			
		R. Stephen Dildine	2133			
	The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address			
Period for	• •					
WHICH - Extensi after SI - If NO p - Failure Any rep	RTENED STATUTORY PERIOD FOR REPLY IEVER IS LONGER, FROM THE MAILING DA ons of time may be available under the provisions of 37 CFR 1.13 X (6) MONTHS from the mailing date of this communication. eriod for reply is specified above, the maximum statutory period w to reply within the set or extended period for reply will, by statute, ly received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)□ F	Responsive to communication(s) filed on	_•				
•	This action is FINAL. 2b) This action is non-final.					
3)□ S	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
С	losed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Dispositio	n of Claims					
4)× C	Claim(s) <u>1-15, 18-34 and 37-44</u> is/are pending	in the application.				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)⊠ C	claim(s) <u>1-15,18-34 and 37-40</u> is/are allowed.					
6)⊠ C	claim(s) <u>41-44</u> is/are rejected.					
7) 🗌 C	claim(s) is/are objected to.					
8) <u> </u>	claim(s) are subject to restriction and/or	r election requirement.				
Applicatio	n Papers					
9)["] TI	ne specification is objected to by the Examine	r.				
•	ne drawing(s) filed on <u>08 May 2006</u> is/are: a)[by the Examiner.			
A	pplicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
R	eplacement drawing sheet(s) including the correction	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).			
11)∐ TI	ne oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority un	der 35 U.S.C. § 119					
12)⊠ A	cknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a))-(d) or (f).			
•	All b) Some * c) None of:					
	1. Certified copies of the priority documents have been received.					
	. Certified copies of the priority documents					
3	 Copies of the certified copies of the prior application from the International Bureau 	-	o in this inational Stage			
* Se	e the attached detailed Office action for a list		od.			
		or the continue copies that receive				
Attachment(s		_				
	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da				
3) 🔲 Informa	or Draftsperson's Patent Drawing Review (PTO-948) Ition Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Io(s)/Mail Date		Patent Application (PTO-152)			

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I. Claim Rejections - 35 USC § 112

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- 2. Claims 41-44 are rejected under 35 U.S.C. 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed. Evidence of concealment of the best mode is based upon the lack in the disclosure of any listing of a set of instructions necessary to implement the claimed "waveform equalization program for execution on a computer".
- Claims 41-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claims 41 through 44 recite a "waveform equalization program for execution on a computer", however, there is no disclosure in the application of any detail of how such a program might be implemented. The only descriptions of the claimed computer program in the specification are "The present invention relates to a waveform equalizing device, method, and program for adaptive equalization of the waveform of a reproduced signal in a signal reproduction system; a computer-readable storage medium with the waveform equalization program stored thereon; and an information reproducing device and communications device incorporating the waveform equalizing device" (page 1), "a signal quality evaluation program and a computer-readable storage medium having the same" (page 2), "may be constructed of a computer including a CPU (central processing unit) executing instructions in a waveform equalization program implementing the functions of the device" (pages 60-61), "the present invention is achievable by loading into a computer a computer-readable storage medium storing program codes (an execution program, intermediate code program, or source program) of a waveform equalization program which is a software implementation of the aforementioned functions" (page 61), "The waveform equalization program of the present invention is a waveform equalization program of operating any one of the waveform equalizing devices, and causes a computer to function as each of the means" (page 79), "the waveform equalization program of the present invention stores a program causing a computer to function as each of the means" (page 80), "a CPU (central processing unit)

for carrying out commands of a signal quality evaluation program which realizes functions of the signal quality evaluation section 110" (pages 103-104), "Further, the signal quality evaluation program of the present invention is arranged so that the program causes a computer to function as each of the means" (page 110) and "Further, the computer-readable storage medium storing the signal quality evaluation program of the present invention is a computer-readable storage medium storing the signal quality evaluation program which causes a computer to realizes each of the means so as to operate the signal quality evaluation device" (pages 110-111). These recitations of the disclosure are mere statements of applicants' intent to carry out the invention by means of a computer program, but they do not provide a written description of said computer program or the instructions necessary to carry it out, therefore, there is no written description of the computer program of claims 41-44.

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4. Claims 41-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The disclosure lacks any listing of a set of instructions necessary to implement the claimed "waveform equalization program for execution on a computer", therefore, one of ordinary skill in the art at the time of applicants' invention would be unable to practice the invention of claims 41-44 without inventing a set of computer instructions to carry out the claimed combination.

II. Claim Rejections - 35 USC § 101

- The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 2. Claims 41 and 43 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim s 41 and 43 recite a computer program per se. Data structures not claimed as embodied in computer-readable media are descriptive material per se. and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects

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of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

III. Allowable Subject Matter

1. Claims 1-15, 18-34, 37-40 are allowed.

IV. Conclusion

- 3. Applicant's amendment necessitated the new grounds of rejection presented in this Office action.

 Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- 4. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Stephen Dildine whose telephone number is (571) 272-3820. The examiner can normally be reached on M F 5:30 am to 2:00 pm.
- 6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- 7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through

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Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R. Stephen Dildine Primary Examiner Art Unit 2133

R. Stephen Dildine